

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A thermodynamically stable bicontinuous one-phase microemulsion comprising an aqueous component (A), a hydrophobic component (B), an amphiphilic component (C/D) and, optionally, one or more members selected from the group consisting of salts and additives (E), wherein said microemulsion is a nanostructured mixture simultaneously comprising a continuous aqueous phase and a continuous hydrophobic phase separated from each other by an amphiphilic film on a microscopic level, said microemulsion has an interfacial tension range between 10^{-1} and 10^{-4} mN/M, and the hydrophobic component (B) contains ~~one or more substances which can be employed as a fuel;~~

(i) at least one mineral oil-based fuel; and/or

(ii) at least one fuel based on vegetable oils or their derivatives.

2. (Previously Presented) The microemulsion according to claim 1, wherein said aqueous component (A)

(i) is selected from water and alcohol-water mixtures; and/or

(ii) contains from 10 to 100% by weight of water; and/or

- (iii) contains additional salts and additives (E) selected from the group consisting of alkali halides, ammonium halides, ammonium salts or organic acids and urea derivatives, the additives (E) being present in concentrations of from 0 to 4% by weight, based on the total microemulsion.

3. (Canceled)

4. (Currently Amended) The microemulsion according to claim 3~~1~~, wherein said hydrophobic component (B) contains diesel fuel as a component.

5. (Previously Presented) The microemulsion according to claim 1:

- (i) which is electrically conductive and/or temperature-stable; and/or
- (ii) in which the proportion of amphiphilic component (C/D) is from 0.5 to 20% by weight; and/or
- (iii) in which the proportion of aqueous component (A) is from 0.5 to 65% by weight; and/or
- (iv) in which the proportion of hydrophobic component (B) is from 4 to 99% by weight.

6. (Previously Presented) The microemulsion according to claim 1, wherein said amphiphilic component (C/D) contains at least one non-ionic surfactant (C).

7. (Previously Presented) The microemulsion according to claim 6, wherein said amphiphilic component (C/D) additionally contains at least

- (i) an ionic surfactant (D); and/or
- (ii) a cosurfactant (C-3); and/or
- (iii) an efficiency booster (C-4) selected from amphiphilic block copolymers.

8. (Previously Presented) The microemulsion according to claim 6, wherein said amphiphilic component (C/D) contains at least, in addition to a linear or branched surfactant (C-1):

- (i) an ionic surfactant (D); and/or
- (ii) a sugar surfactant (C-2); and/or
- (iii) an alcohol; and
- (iv) the proportion of component (C) comprising components from the groups linear or branched surfactants (C-1), surfactants with a core structure (C-2), cosurfactants (C-3) and efficiency boosters (C-4) selected from amphiphilic block copolymers, based on the amphiphilic component (C/D), is from 50 to 100% by weight; and/or
- (iv) the proportion of component (C-2), based on the total amount of component (C), is from 0 to 85% by weight.

9. (Previously Presented) The microemulsion according to claim 1, wherein component (A) is water or a water-ethanol mixture, component (B) is diesel fuel, component (C) comprises at least one polyethoxylated long-chain alcohol, and wherein the proportion of (C) in the microemulsion is from 1 to 10% by weight.

10. (Previously Presented) The microemulsion according to claim 9, wherein (A) is water, (C) is a polyethoxylated C₁₃ oxo alcohol (C_{12/14}E₅), and (E) is ammonium carbonate, and optionally:

- (i) (D) is AOT; and/or
- (ii) (D) is a mixture of oleic acid and dodecylamine.

11. (Previously Presented) The microemulsion according to claim 9, wherein (C) is a polyethoxylated decanol (C₁₀E₈) in combination with sorbitan monooleate, and optionally:

- (i) the following proportions of the components are present: (A) from 39 to 55% by weight; (B) from 34 to 47% by weight; (C) C₁₀E₈ from 4.2 to 10.5% by weight and sorbitan monooleate from 2.8 to 9% by weight; and/or
- (ii) (A) contains ethanol, and the ethanol content in the microemulsion is from 2.0 to 7.4% by weight.

12. (Previously Presented) The microemulsion according to claim 9, wherein (A) is water, (C) is a polyethoxylated C₁₃ oxo alcohol (C_{12/14}E₅), (D) is AOT, and optionally:

- (i) (E) is sodium chloride; and/or
- (ii) (E) is sodium chloride and urea; and/or
- (iii) (E) is ammonium acetate.

13. (Previously Presented) The microemulsion according to claim 9, wherein (A) is water, (C) is a polyethoxylated C₁₃ oxo alcohol (C_{12/14}E₆), (D) is ammonium oleate, and (E) is ammonium acetate, and optionally the following proportions of the components are present: (A) from 40 to 60% by weight; (B) from 40 to 60% by weight; (C) from 1.5 to 2.5% by weight; (D) from 1.5 to 2.5% by weight; and (E) from 0.6 to 1.6% by weight.

14. (Previously Presented) The microemulsion according to claim 9, wherein (A) is water, (C) is a polyethoxylated C₁₃ oxo alcohol (C_{12/14}E₅) and a further polyethoxylated alcohol, and optionally the following proportions of the components are present: (A) from 40 to 52% by weight; (B) from 40 to 52% by weight; (C) from 3.0 to 8.0% for each individual component.

15. (Previously Presented) The microemulsion according to claim 1, which is a fuel.

16. (Canceled)

17. (Previously Presented) A method for the determination and optimization of microemulsions according to claim 1, comprising the steps of:

- (i) determining the temperature variance and adjusting the temperature invariance of the one-phase microemulsion by adjusting the content of amphiphilic component (C/D); and

- (ii) adjusting the water-to-oil ratio within a range of the volume ratio of oil to water plus oil of from 4 to 99% by volume of the hydrophobic component (B).

18. (Previously Presented) A fuel comprising a microemulsion according to claim 1.

19. (Previously Presented) An explosive comprising a microemulsion according to claim 1.